

## ARGUMENTS/REMARKS

Claims 1, 3 through 21 and 23 through 29 and 32 through 36 are currently pending in the present application. Claims 1, 3, 4, 6, 14, 34 and 36 have been amended.

The Office Action states that claim 14 is objected to because of informalities. The misspelling has been corrected as suggested by the Examiner. Applicant respectfully requests reconsideration and withdrawal of this objection.

The Office Action Summary states that the Specification is objected to; however, there was not any objection noted in the Office Action. Only claim 14 was indicated as being objected to. The objection to claim 14 has been corrected as suggested by the Examiner.

In the Office Action, claims 1, 3 through 6, 8 through 10, 15, 16, 19 through 21, 23 through 29, 32, 33, and 36 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,511,511 to Slivka et al (hereinafter Slivka), as evidenced by U.S. Patent No. 5,607,474 to Athanasiou et al. (Athanasiou). Applicants respectfully disagree.

According to the Office Action, Slivka discloses "a brush-like structure" as recited in independent claim 1. Slivka discloses an "implant material preferably compris[ing] a polymeric matrix, preferably a biodegradable matrix, having fibers uniformly distributed therein in predominantly parallel orientation". (Column 1, ll. 64 to 67).

Slivka rather discloses a fiber-reinforced polymer scaffold, wherein fibers are uniformly distributed within the scaffold material, thereby stabilizing the pore walls and providing for a characteristic columnar pore architecture. The fiber-reinforced structure according to Slivka implies that the fibers are embedded in and enclosed by the

polymeric matrix of the implant rather than sticking out at its surface in a brush-like manner. Moreover, in contrast to the contour of the claimed brush-like surface structure, the contour of the fiber-reinforced polymer scaffold is *not* formed by the fibers, but the polymeric matrix itself, thus forming a smooth surface not the claimed "brush-like surface", recited in independent claim 1.

In order to further clarify this distinction, claim 1 is amended to recite "at least one layer consisting of at least partially oriented fibers (2)".

This amendment is supported in the specification at page 5, line 9, page 12, line 20, page 14 at line 3. The amendment clarifies the term "brush-like structure" by specifying that the layer is composed of partially oriented fibers *only*, by using the closed claim language.

The Office Action further offers that the alignment of the fibers essentially in parallel to the insertion axis of the prosthetic device and perpendicular to a top surface of the base component can be directly derived from the Slivka document.

Slivka does not disclose the specific orientation of the fibers. Slivka does disclose that fibers are distributed throughout the polymeric matrix "in predominantly parallel orientation" and "predominantly in a single direction (Col. 1, line 66 and Col. 2, line 5, respectively), Slivka fails to define a particular direction. Slivka does not choose a defined orientation of the predominant alignment of the fibers as the fibers are not supposed to form a brush-like surface structure, as recited in claim 1, but instead act as reinforcement of the characteristic pore architecture of the matrix material.

The Office Action further alleges that by reference to Athanasiou, Slivka also discloses the specific three-layered structure of the prosthetic device and in particular the stabilization area according to the claimed invention. The stabilization area is alleged to be met by *any portion* of the implant between an arbitrarily located layer having partially oriented fibers and a base component.

Independent claim 1 provides for "a stabilization area (3) provided between said at least one layer consisting of at least partially oriented fibers and said base component (4)". This stabilization area specifically holds the fibers in place in the specific brush-like arrangement and is located between two discrete elements. (Specification at P. 12, ll. 24). In contrast, Slivka discloses a uniform distribution of fibers that are embedded throughout the polymer thus eliminating the need for a stabilizing area as there is a lack of a brush-like structure in need of stabilization.

Slivka as evidenced by Athanasiou does not anticipate claim 1 or claims 3 through 6, 8 through 10, 15, 16, 19 through 21, 23 through 29, 32, 33, and 36, that depend therefrom. Reconsideration and withdrawal of the 35 U.S.C. 102(b) rejection are respectfully requested.

In the Office Action, claims 7, 17 and 18 were rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Slivka, as evidenced by Anthansiou.

Dependent claims 7, 17 and 18 depend indirectly from independent claim 1. For the same reasons noted above with regard to claims 1 or claims 3 through 6, 8 through 10, 15, 16, 19 through 21, 23 through 29, 32, 33, and 36, claims 7, 17 and 18 are neither anticipated under 35 U.S.C. 102(b) nor made obvious under 35 U.S.C. 103(a) over Slivka as evidenced by Anthansiou.

In the Office Action, claims 11 through 14 and 34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Slivka, as evidenced by Anthansiou, in view of U.S. Patent No. 6,626,950 to Brown et al. (hereinafter "Brown").

Brown relates to the field of tissue repair and the use of composite scaffold implants and scaffold fixation devices. Brown provides for an implant consisting of a foamed polymer and a ceramic base component.

Brown does not correct the several deficiencies of Slivka. Brown does not disclose or suggest "at least one layer consisting of at least partially oriented fibers (2) or that the "fibers (2) are aligned essentially in parallel to the insertion axis of the prosthetic device and form a brush-like structure".

Reconsideration and withdrawal of the 35 U.S.C. 103(a) rejection of claims 11 through 14, and 34 are respectfully requested.

In the Office Action, a claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slivka, as evidenced by Anthansiou, view of U.S. Patent No. 4,553,272 to Mears (hereinafter "Mears").

Claim 35 depends from independent claim 1 and provides that "the stabilization area (3) is an absolute or selective cell barrier layer for preventing cells and blood from diffusing from the base component (4) into the brush-like fiber structure".

Mears is directed to a method of regenerating living tissues and is offered for the purpose of disclosing an open-pored implant containing isolated daughter cells.

Mears does not disclose or suggest "at least one layer consisting of at least partially oriented fibers (2) or that the "fibers (2) are aligned essentially in parallel to the insertion axis of the prosthetic device and form a brush-like structure".

In view of the foregoing, Applicant respectfully submits that all claims present in this application patentably distinguish over the cited prior art reference. Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of the rejection of the claims. Also, Applicant respectfully requests that this application be passed to allowance.

If for any reason the Examiner feels that consultation with Applicant's attorney

would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

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